

MATERIAL SAFETY DATA SHEET



27155

Peters Professional[®] Soluble Plant Food 30-10-10 Orchid

Scotts-Sierra Horticultural Products Co
The Scotts Company
14111 Scottslawn Road
Marysville, Ohio 43041

In Case of Emergency call
1-937-644-0011 (USA)
For non-Emergency calls
1-937-644-0011 (USA)

I. MATERIAL IDENTIFICATION

Product Name Peters Professional(R) Soluble Plant Food
Analysis 30-10-10 Orchid
Stock Number 27155

NFPA Hazard Ratings

Health	2
Flammability	0
Reactivity	1

0 Least
1 Slight
2 Moderate
3 High
4 Severe

II. HAZARDOUS INGREDIENTS

MATERIAL	CAS #	OSHA PEL	ACGIH TLV
Potassium Nitrate	7757-79-1	None	None
(containing up to 5% Sodium Nitrate)	7631-99-4	None	None
Monoammonium Phosphate	7722-76-1	None	None
Monopotassium Phosphate	7778-77-0	None	None
Urea	57-13-6	None	None
Magnesium Sulfate	7487-88-9	None	None
Boric Acid	10043-35-3	None	None
Copper EDTA	14025-15-1	None	None
Iron EDTA	15708-41-5	None	None
Manganese EDTA	15375-84-5	None	None
Sodium Molybdate	7631-95-0	5mg/m3	5mg/m3
Zinc EDTA	14025-21-9	None	None

The ACGIH Threshold Limit Values for nuisance (inert) dusts containing < 1% crystalline silica and no asbestos are: 10 mg/m3 total, 5 mg/m3 respirable

III. FIRST AID PROCEDURES

Eyes If in eyes, flush with water for 15 minutes holding eyelids open Get medical attention if irritation persists
Ingestion Never give anything by mouth to an unconscious or convulsing person Have conscious person drink 1 to 2 glasses of water, then induce repeated vomiting until vomit is clear. Call physician
Skin Wash with plenty of soap and water
Inhalation Remove to fresh air Treat symptomatically

IV. HEALTH HAZARD INFORMATION

Summary of Risks

Prolonged or repeated direct contact with fertilizer may irritate eyes and skin. Inhalation of dust may irritate nose, throat, and lungs. Prolonged exposure may cause weakness, depression, headache, mental impairment, anemia, methemoglobinemia, and kidney injury

Ingestion of product can cause severe gastrointestinal irritation, muscular weakness, and blue-tinged skin (cyanosis). Infants and children are especially at risk for cyanosis. Ingestion of large amounts may result in death

A Russian study of 70 workers in an environment with high concentrations of urea found a high incidence of protein metabolism disturbances and chronic weight loss. Exposure levels were not reported

Tumorigenic, mutagenic, and reproductive effects of potassium nitrate and urea in laboratory animals are reported in the NIOSH Registry of Toxic Effects

Blue dye may cause temporary staining of skin

Medical conditions which may be aggravated by contact	Skin abrasions and sores. Inhalation of dust may aggravate asthma
Target Organs.	Skin, eyes, respiratory tract, gastrointestinal tract, and central nervous system.
Primary Entry Route(s).	Ingestion, inhalation
Chronic Effect(s):	Chronic exposure to nitrates may cause weakness, depression, headache, blood changes (methemoglobinemia and anemia), and kidney injury (nephritis)
Acute Effect(s):	Excessive inhalation of dust may cause irritation and coughing Prolonged skin contact with product may cause mild irritation

Ingredients Listed as a Carcinogen

IARC Monographs	No
NTP	No
OSHA	No

V. PERSONAL PROTECTION AND PRECAUTIONS

Personal protective equipment

Goggles	None required for routine use as fertilizer High airborne dust levels or mists of product dissolved in liquid may be irritating; use chemical goggles
Gloves.	None required for normal use If prolonged or repeated use irritates skin, use natural rubber gloves
Respirator	If airborne dust levels are high or irritation occurs, use NIOSH/MSHA approved respirator for dusts, mists, and fumes to reduce exposures to acceptable levels

Workplace Considerations

Ventilation	Ventilation and personal protection are recommended whenever dust levels are high or product does not remain intact
Safety Stations	Running water should be available in case material gets in eyes

VI. PHYSICAL HAZARD INFORMATION

Flammable Limits (% in Air)	N/A	Color	Aqua-blue powder
Extinguishing Media	Water	Odor	Slight yeasty odor
Auto Ignition Temperature.	N/A	Boiling Point.	Decomposes on heating
Flash Point (method)	Decomposes on heating	Solubility in H2O	3.5 lbs/gal
		Specific Gravity.	(H2O = 1) 45.1-47.2 lbs/ft ³
		Vapor Pressure	Not Known
		Evaporation Rate	N/A
		pH	5.4 (10% solution)

Reactivity

Stability:	Stable
Hazardous Polymerization:	Will Not Occur
Conditions to Avoid:	Extreme heat Contact with strong alkalies, oxidizers, and reducing agents. Contact with fuels and other organic or combustible materials. Active metals such as aluminum and magnesium. Strong alkalies and reducing agents Chlorine compounds.
Hazardous Decomposition Products:	Oxides of nitrogen, potassium, sulfur and phosphorous as well as ammonia, biuret, cyanuric acid and cyanic acid.
Chemical Incompatibilities:	Nitrates are incompatible with strong alkalies and reducing agents, active metals (such as aluminum and magnesium), ammonia, organic, and combustible materials. Monammonium phosphate is incompatible with sodium hypochlorite. Urea is incompatible with strong oxidizers, alkalies, sodium nitrate, and many chlorine compounds (including bleach and other household cleaning products)
Unusual Fire, Explosion and Reactivity Hazards:	This product is comprised of materials which are oxidizers in their pure, unmixed forms. It will not burn but can provide oxygen for existing fires and cause combustible materials to ignite explosively. Material decomposes on heating to emit ammonia and toxic oxides of nitrogen, sulfur, phosphorous, potassium as well as biuret, cyanuric acid and cyanic acid.

In Case of Fire:

Evacuate area. Flood with water to cool containers. Apply water from a safe distance to avoid splattering of molten material. Wear self-contained breathing apparatus to fight large fires.

VII. REGULATORY INFORMATION

DOT Classification: Not DOT regulated

VIII. STORAGE AND SPECIAL PRECAUTIONS**Precautions to be taken in handling and storage**

Store in a cool, dry area away from incompatible materials and heat sources. Store away from feed and foodstuffs, as well as household cleaning products. Wash hands with soap and water after handling product. Keep out of reach of children.

In case of spills

Avoid dusting or misting conditions during cleanup. If material is uncontaminated, collect and reuse as recommended for product. If contaminated, put in appropriate container and dispose. Keep spills away from drinking water supplies. After cleaning up spill, flush area with water.

Waste Management/Disposal

Apply as fertilizer to field. If product is contaminated, dispose of in an approved landfill disposal facility, in accordance with applicable federal, state, and local regulations.

Revised: #####

Date Issued: #####

The information contained herein is, to the best of Scott's knowledge and belief, accurate and reliable as of the date of preparation of this document. However, no warranty or guarantee, express or implied, is made as to the accuracy or reliability, and Scotts shall not be liable for any loss or damage arising out of the use thereof. No authorization is given or implied to use any patented invention without a license. In addition, Scotts shall not be liable for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the product.